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New *Monimiaceæ* from the Malagasy region (SW Indian Ocean)

D. H. Lorence

Summary : Nine new taxa of *Monimiaceæ* from Madagascar and the Mascarene and Comore archipelagos are presented in this paper : one new *Monimia* (*M. amplexicaulis* Lorence), and eight new taxa of *Tambourissa* (*T. cocottensis* Lorence, *T. comorensis* Lorence, *T. cordifolia* Lorence, *T. crassa* Lorence, *T. elliptica* (Tul.) A. DC. subsp. *micrantha* Lorence, *T. moheliensis* Lorence, *T. nosybensis* Lorence and *T. tau* Lorence). A short discussion of the ecology and affinities is presented under each species.

Résumé : Neuf nouveaux taxons de *Monimiaceæ* de Madagascar, des Mascareignes et des Comores sont décrits dans ce travail : un nouveau *Monimia* (*M. amplexicaulis* Lorence) et huit nouveaux taxons de *Tambourissa* (*T. cocottensis* Lorence, *T. comorensis* Lorence, *T. cordifolia* Lorence, *T. crassa* Lorence, *T. elliptica* (Tul.) A. DC. subsp. *micrantha* Lorence, *T. moheliensis* Lorence, *T. nosybensis* Lorence et *T. tau* Lorence). Une courte discussion sur l'écologie et les affinités de chacune de ces plantes est présentée.

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Madagascar and its satellite islands, the Mascarene and Comore archipelagos, harbor a large number of endemic genera and species of *Monimiaceæ*, Laurales (Hutchinson, 1964 ; Cavaco, 1965 ; Leroy, 1978). Nine new taxa were recognized during the course of a systematic revision of the *Monimiaceæ* in the Malagasy region for my doctoral dissertation (Lorence, 1980), and preparation of an account for Flore des Mascareignes. These new taxa include one species of *Monimia*, plus seven species and one subspecies of *Tambourissa*. Diagnoses and short discussions of these new taxa are given in the following account. Complete descriptions and specimen citations will be given in a forthcoming publication (Lorence, in preparation).

MONIMIA Thouars

Monimia is a genus of dioecious shrubs and trees endemic to the Mascarene Islands of Mauritius and Réunion where the species occur as occasional to abundant components

of the wet and cloud forest zones. In addition to the two previously described species of *Monimia*, *M. ovalifolia* Thouars and *M. rotundifolia* Thouars (syn. *M. citrina* Tul.), recent botanical explorations in Réunion by Dr. Th. Cadet and other workers have revealed the presence of an additional species, *M. amplexicaulis* Lorence.

Monimia amplexicaulis Lorence, *sp. nov.*

A M. rotundifolia Thouars *affinis, sed foliis sessilibus vel subsessilibus, profunde cordatis, trichomatibus pro parte maxima stellatis cum radiis 4-12 horizontalibus patulis ornatis, pro parte minore simplicibus et fasciculatis cum radiis longis erectis patentibus in pagina adaxiale laminarum præditis, differt.* (Pl. 1, *1a*).

Type : Réunion : *Lorence 2504*, forestry road above Tévelave along the Dominial line (Hauts du Tévelave) ; cloud forest transitional to heath formation, alt. ca. 1700 m, 6.3.1979, fl., fr. (holo-, MO ; iso-, K, MAU, P, REU, Z).

Distribution : The species is endemic to Réunion.

Ecology : *Monimia amplexicaulis* is occasional to locally abundant as a component of the mid to upper levels of cloud forest and lower limits of *Philippia* heath formations from ca. 1400 to 2100 m. It is most frequent on the sheltered, leeward escarpments of the volcanic " cirques ", e.g., at Petit Matarum, Coteau Kerveguen above Cilaos, Hauts du Tévelave, etc. where it characteristically forms discrete populations and usually replaces *M. rotundifolia* (Pl. 1, *1b*).

Ecological differentiation between the two species was studied at Hauts du Tévelave, where *Monimia amplexicaulis* replaces *M. rotundifolia* which occurs alone below ca. 1700 m. Both species occur sympatrically along the Dominial line (Ligne Dominicale) at ca. 1700 m, and no intermediates were observed among dozens of individuals examined. The two species are easily recognized in the field and appear to maintain their integrity by flowering at different times.

Remarks : *Monimia amplexicaulis* is a shrub or small tree attaining 10 m high and 30 cm dbh. It shares a number of morphological features with the closely related *M. rotundifolia*, including the presence of three types of foliar trichomes : stellate, fasciculate (multangulate), and simple. Foliar trichomes are mostly stellate with short arms in *M. amplexicaulis*, however, and not predominantly long fasciculate and simple as in *M. rotundifolia*. *Monimia amplexicaulis* further differs from the latter species by its sessile, deeply cordate and amplexicaul leaves with more numerous secondary veins (five to seven pairs).

TAMBOURISSA Sonnerat

Tambourissa is a genus of about 40 species of monoecious or dioecious trees and shrubs restricted to Madagascar (23 sp.), the Comores (5 sp.), and the Mascarene Islands of

Mauritius (10 sp.) and Réunion (2 sp.). All the species display a high degree of endemism, each being restricted to a given island and frequently to a specific habitat within the island. Species of *Tambourissa* are occasional to locally common components of the evergreen moist, wet, and cloud forest formations of these islands. They are often conspicuous because of their peculiar flowers and fruiting receptacles.

1. **Tambourissa cocottensis** Lorence, *sp. nov.*

A T. tetragona (Boiv. ex Tul.) A. DC. *affinis, sed ramulis foliatis gracilioribus teretibus nec alatis ; floribus fœminis solitariis vel fasciculis bifloris, numquam racemosis ; receptaculo fœmino brunneo et suberoso, napiformi-depresso, orificio 5-7 lobato, stylis duplo longioribus 1.5-2.0 mm longis, differt.* (Pl. 1, *2*).

Type : Mauritius : *Lorence & Lecordier 2167*, Mt. Cocotte Nature Reserve ; low cloud forest on the summit, alt. 760 m, 19.12.1978, fl., fr. (holo-, MO ; iso-, MAU).

Distribution : Endemic to Mauritius.

Ecology : The species is known only from a single population on the summit of Mt. Cocotte in low, degraded cloud forest (annual precipitation ca. 5000 mm). Extensive searching revealed only four individuals of *Tambourissa cocottensis* growing within an area ca. 100 m across.

Remarks : The species closely resembles *Tambourissa tetragona* in leaf morphology, but lacks the winged petioles and stems of the latter. In both species the flowers are cauliflorous and structurally similar, but those of *T. cocottensis* are solitary or in fascicles of two and externally corky, thus differing from the smooth, glabrous racemose flowers of *T. tetragona*. Flowers of *T. cocottensis* also resemble those of *T. tau*, from which they differ by their distinctive quadrangular floral pedicels bearing four decussate rows of ciliate bracteoles.

2. **Tambourissa comorensis** Lorence, *sp. nov.*

A T. leptophylla (Tul.) A. DC. *affinis, sed statura grandiori ad 20 m alto × 50 cm diametro ; ramulis et foliis juvenilibus glabris vel solum piliis sparsis instructis ; floribus in racemis parvis florum quattuor ad novem dispositis ; gemmis masculis grandioribus, staminibus numerosis (125-150) ; orificio florum fœminorum grandiore latitudine 1/2-2/3 plo quam receptaculo breviori, floribus fœminis stylis brevioribus (0.3-0.5 mm longis), coalescentibus obtuse columnaribus ; receptaculo fructus lævi extus fusco orificio grandiore latitudine 1/3-1/2 plo quam receptaculo breviori, differt.* (Pl. 1, *3*, *4*).

Type : Comore archipelago : Grande Comore : *Lorence & Banfi 2878*, La Grille forest above Maoueni, alt. ca. 800 m, 29.7.1979, fl., fr. (holo-, MO ; iso-, B, G, K, MAU, P, REU, Z).

Distribution : Endemic to Grande Comore.

Ecology : The species occurs in lower montane wet forest. All known collections of *Tambourissa comorensis* are from La Grille forest along the northern part of the central

ridge (elevation 800-900 m), and from the forest above Ntsorale Dimane (elevation ca. 250-900 m) along the eastern slope of the same massif. At La Grille I found the species to be a locally abundant to codominant subcanopy or canopy tree. It is striking when in fruit, with numerous large, brown fruiting receptacles hanging from the trunk and branches. When ripe, these split open to reveal an array of bright red-orange carpels set against the pale orange receptacular tissue. One of the largest known members of the genus both in habit and fruit, *T. comorensis* flowers from August to December concurrently with the ripening of the preceeding year's fruit crop.

Remarks : *Tambourissa comorensis* is closely allied to *T. leptophylla*, which differs by its smaller male buds and fewer stamens (80-90), and by its female flowers with much smaller orifices and sharp, conical styles. Also, fruits of the latter species are uniformly dull, corky brown externally with a much smaller orifice. Dried fruits of *T. comorensis* are strongly fragrant like those of *T. moheliensis* Lorence from the neighboring island of Mohéli. *Tambourissa kirkii* Cav. from nearby Anjouan differs by its small, globular male flowers that split only partly open and contain fewer (ca. 50) stamens with acute, prolonged connectives.

3. **Tambourissa cordifolia** Lorence, *sp. nov.*

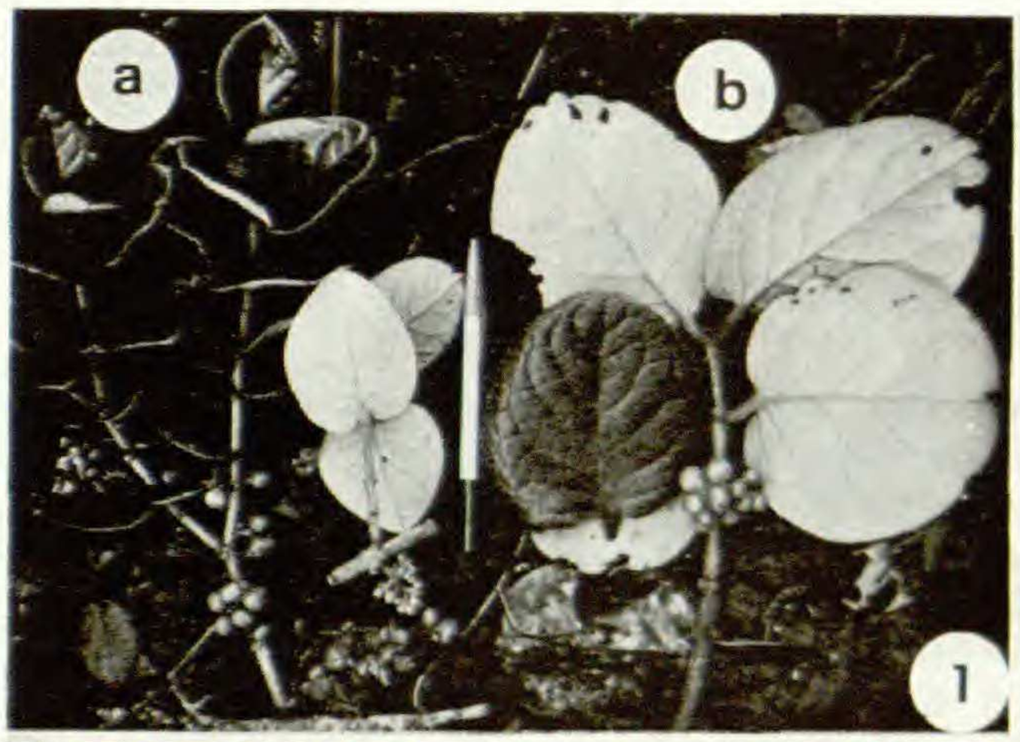
Species insignis habitu fruticoso 50-200 cm alta, ramulis gracilibus multis erectis, foliis sessilibus vel subsessilibus, basi cordatis amplexicaulibus, apice rotundatis mucronatis congeneribus bene distincta. Flores vero T. amplifolia (Boj. ex Tul.) A. DC. *similes sed differunt : dioici, inflorescentia glabra, gemmis floribusque masculis grandioribus, staminibus numerosis (300-400), receptaculo floris fœmini profundiore napiformi-urceolato.* (Pl. 1, *5*, *6*).

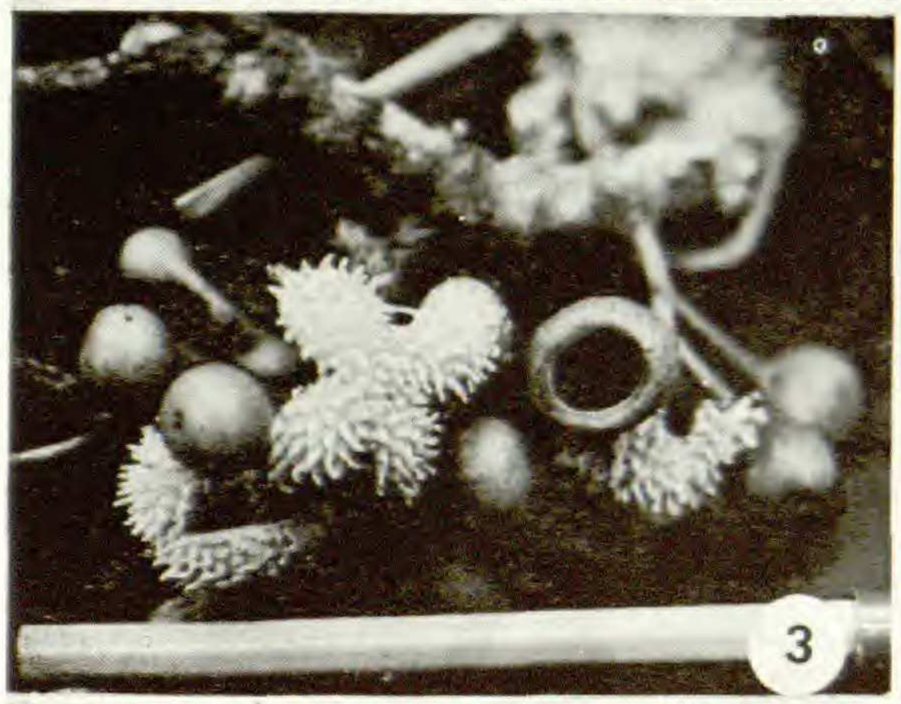
Type : Mauritius : *Lorence 2631*, Pétrin Nature Reserve ; low *Philippia* heath formation, alt. 630 m, 15.5.1979, fl., fr. (holo-, MO ; iso-, K).

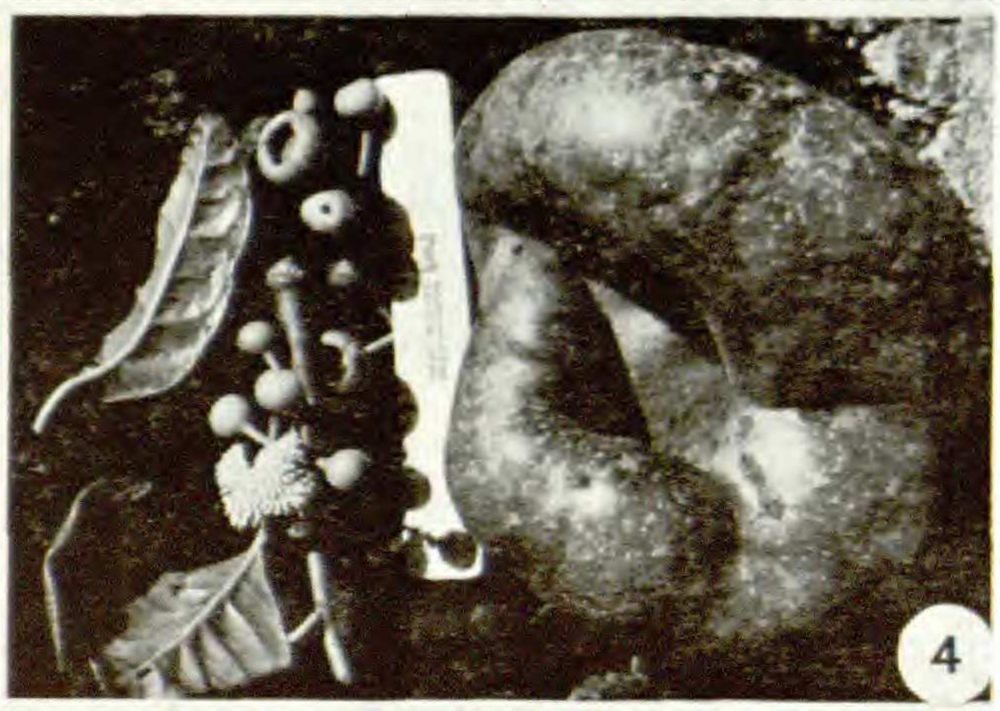
Distribution : Endemic to Mauritius.

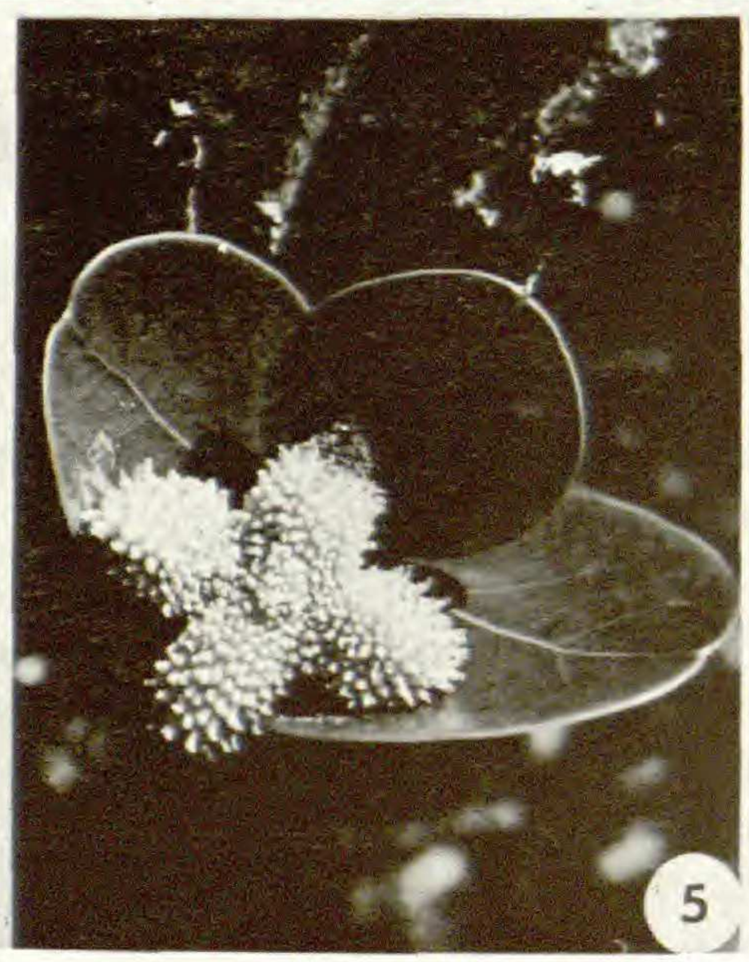
Ecology : *Tambourissa cordifolia* is highly specialized edaphically and restricted to upland areas of hard, unweathered ground water laterite or « cuirasse » supporting low scrub formations, often of *Philippia* heath. The species is particularly abundant at Pétrin (alt. 630 m, annual precipitation 4000 mm), and also occurs in comparable *Philippia* heath on Mt. Laselle (alt. 550 m, precipitation 4500 mm), in low marshy scrub at Les Mares near the base of Mt. Cocotte (alt. 630 m, precipitation 4800 mm), at Crown Land Declerc (alt. ca. 600 m), and also in low thicket near the summit of Piton de La Rivière Noire (alt. 827 m, precipitation 4200 mm).

Remarks : Its sessile, cordate leaves and shrubby habit are presumably adaptations to the unique habitat which *Tambourissa cordifolia* inhabits, and readily distinguish it from its congeners. Among other Mascarene species, *T. cordifolia* appears to be most closely allied to *T. amplifolia* in terms of floral morphology. Both are cauliflorous or rarely ramiflorous with often solitary, long-pedicellate flowers. *Tambourissa amplifolia* differs by its larger habit (an understory treelet), basal cauliflory, monoecy, canescent inflorescences









Pl. 1. — Two species of **Monimia** from Réunion : **1a**, **M. amplexicaulis** Lorence, fruiting stem and female flowering stem × 0.12 (*Lorence 2504*, type) ; **1b**, **M. rotundifolia** Thouars, fruiting stem × 0.12 (*Lorence 2506*, MO). — **Tambourissa cocottensis** Lorence : **2**, leafy stem and immature fruit × 0.33 (*Lorence & Lecordier 2167*, holotype). — **Tambourissa comorensis** Lorence : **3**, inflorescences with buds, male flowers, and female flower × 0.5 (*Lorence & Banfi 2878*, type) ; **4**, inflorescences with male flower, buds, and female flowers, plus submature fruit ; scale 15 cm (*Lorence & Banfi 2878*, type). — **Tambourissa cordifolia** Lorence : **5**, leafy stem with male flower × 0.75 (*Lorence*, unvouchered) ; **6**, female flower and leafy stem × 0.75 (*Lorence*, unvouchered) ; photos taken at Pétrin Nature Reserve, Mauritius.

with longer, thinner pedicels, smaller floral receptacles, and much larger, non-cordate leaves with distinct petioles.

4. **Tambourissa crassa** Lorence, *sp. nov.*

A T. elliptica (Tul.) A. DC. subsp. elliptica *affinis, sed habitu dioico, trunco sæpe crasso ad 30 cm diametro, vertice compacto ; foliis incrassatis in sicco sæpe luteo-viridibus fragrantibusque, venis obscurioribus solum ad 3o manifestis ; petiolo sæpe breviore crassioreque ; floribus fructibusque solitariis terminalibus vel rare caulinis tunc in surculis foliosis vel sine foliis, differt.* (Pl. 2, 7).

Type : Réunion : *Lorence 2780*, road to Maïdo above Petite France (on C.F. 81) ; low cloud forest of *Weinmannia*, *Dombeya*, etc., alt. ca. 1200-1400 m, 19.7.1979, fl. (holo-, MO ; iso-, K, MAU, P, REU, Z).

Distribution : Endemic to Réunion.

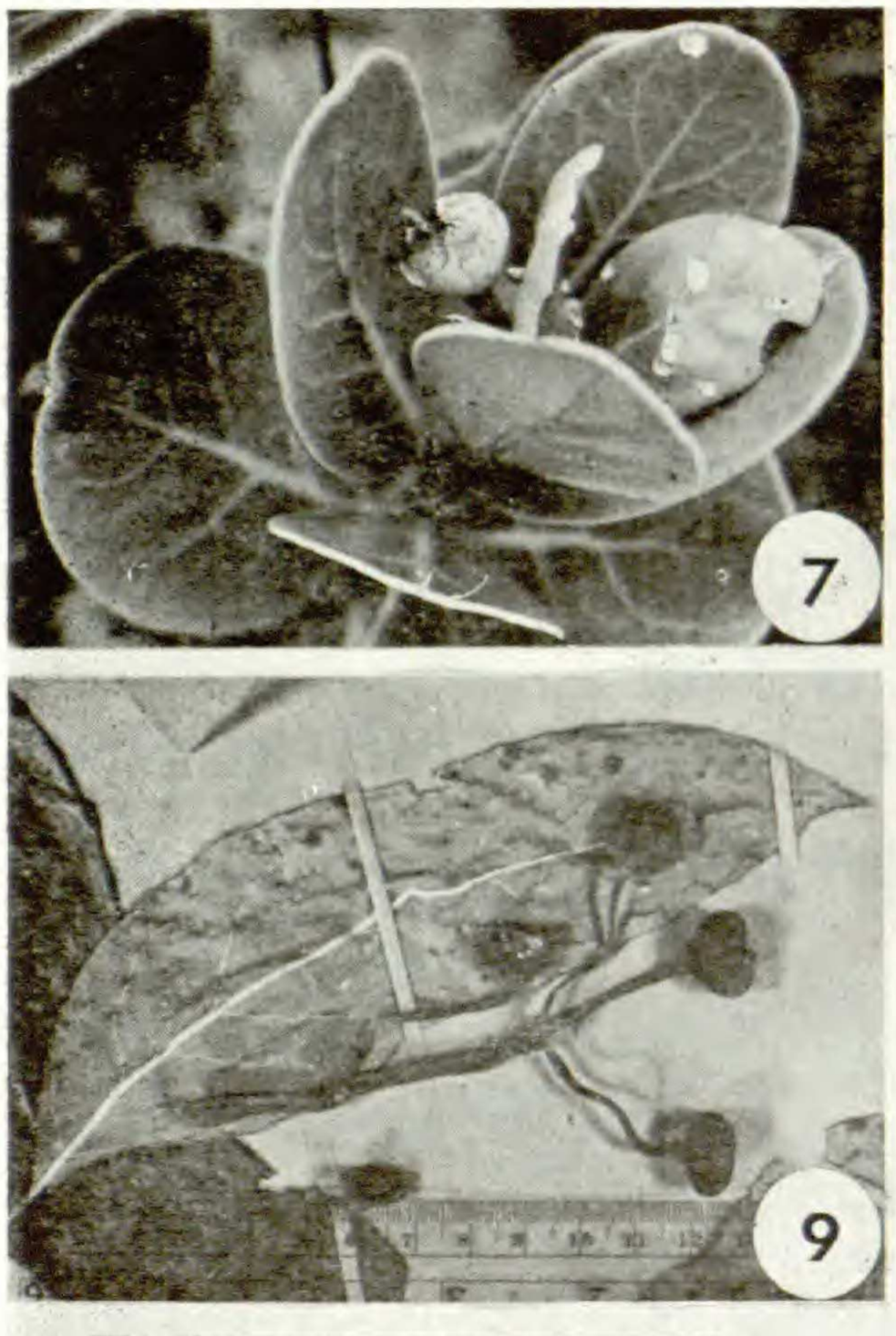
Ecology : *Tambourissa crassa* is local and occasional in cloud forest formations from ca. 1200 to 2000 m elevation, rarely extending down to ca. 700 m (e.g., at Basse Vallée ; *Bosser 21313*, P).

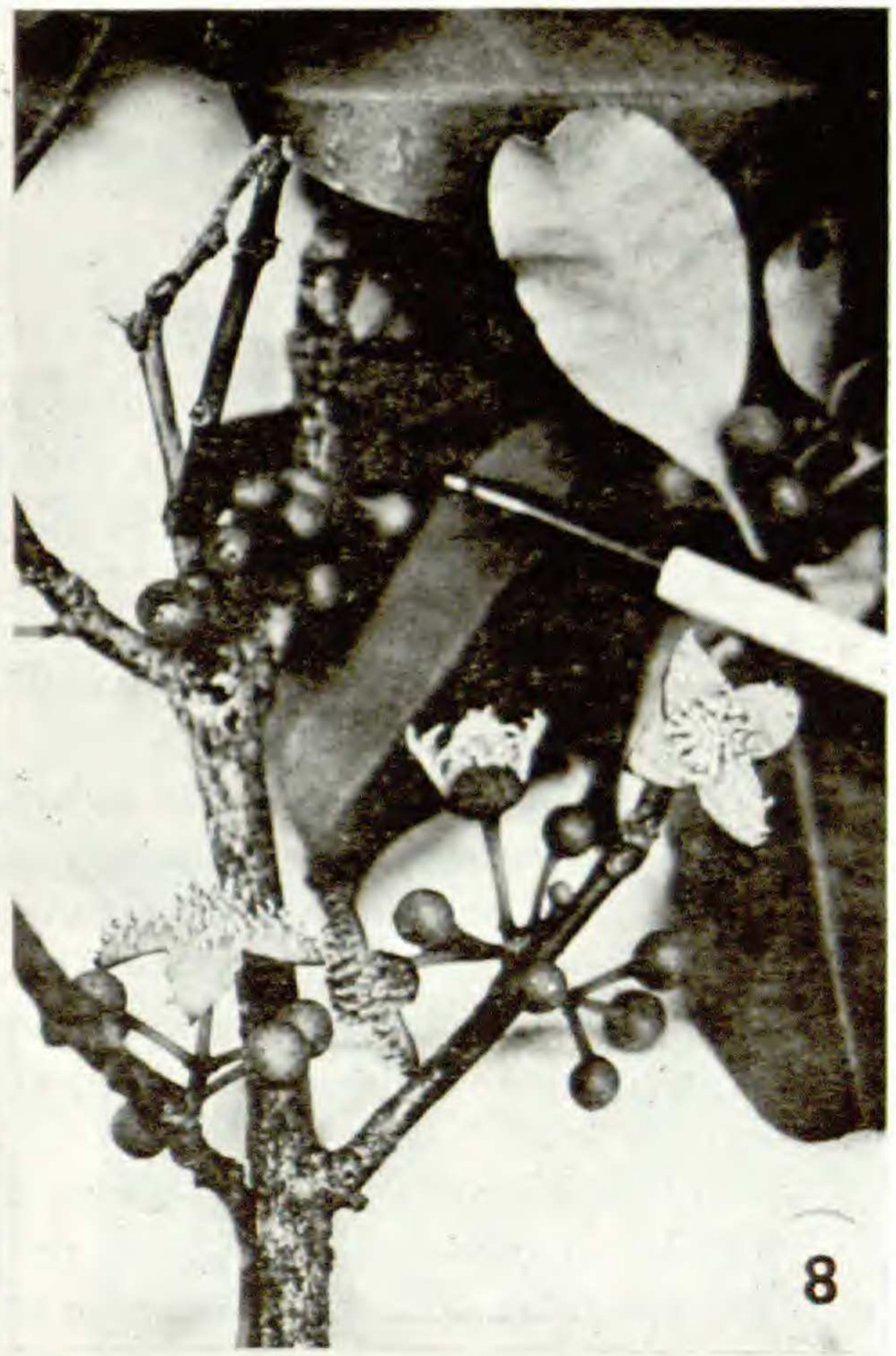
Remarks : *Tambourissa crassa* is most closely allied to *T. elliptica* (Tul.) A. DC. subsp. *elliptica*, also from Réunion, from which it differs by its dioecious habit, thicker leaves, and solitary, terminal flowers and fruits produced at the ends of the top branches (rarely caulinary on short, leafy or leafless bracteate shoots, but even then solitary and terminal). Other distinguishing features of *T. crassa* are its somewhat pachycaulous habit, its sparse, compact crown, the almost camphor-like fragrance of the dried specimens, and the absence of stone cells and tanniferous idioblasts in the floral ground tissue. Both *T. crassa* and *T. elliptica* subsp. *elliptica* have large, structurally similar leaves, and large flowers with numerous stamens and styles which are presumably adaptations to a common habitat and similar pollinators. Both taxa frequently occur sympatrically in the cloud forest zone (alt. 1200-2000 m), e.g., at Hauts du Tévelave and along the road to Maïdo, where neither intermediates nor putative hybrids were observed.

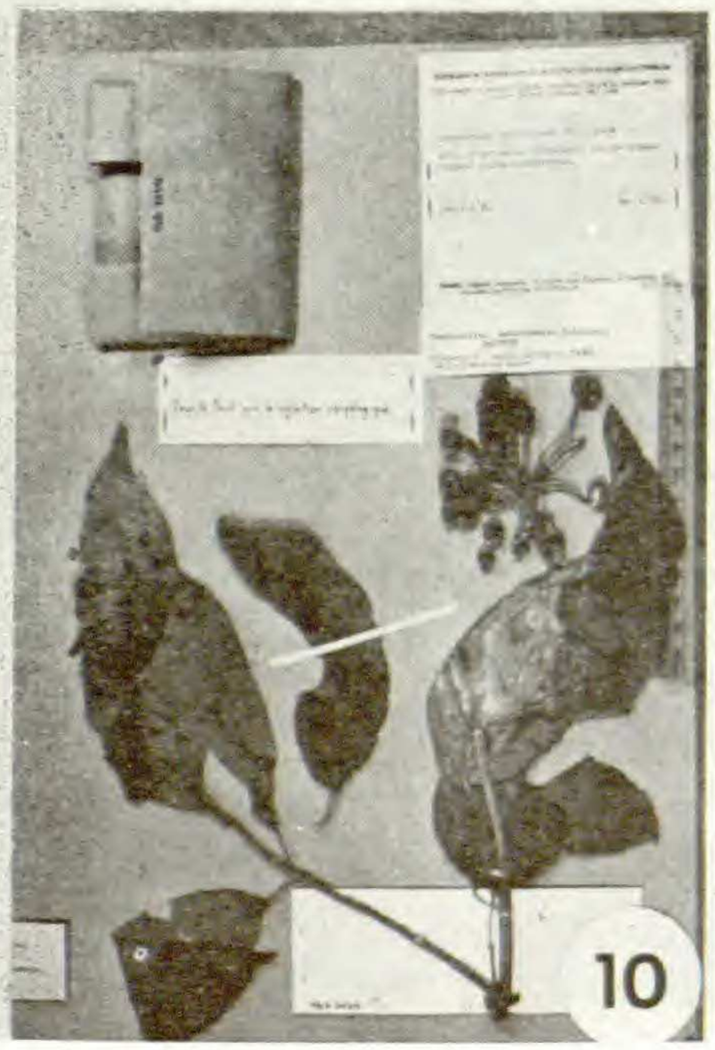
Unlike the more variable *Tambourissa elliptica*, *T. crassa* is quite stable morphologically. As in most species, a certain amount of intraspecific variation occurs in leaf size and shape, flower color, and number of stamens, but both taxa are quite distinct morphologically. In *T. crassa* both pale yellowish-green and dark purple flower color morphs occur, although flower color appears to be constant within a given population (e.g., yellow at Col de Bellevue, and purple at Hauts du Tévelave).

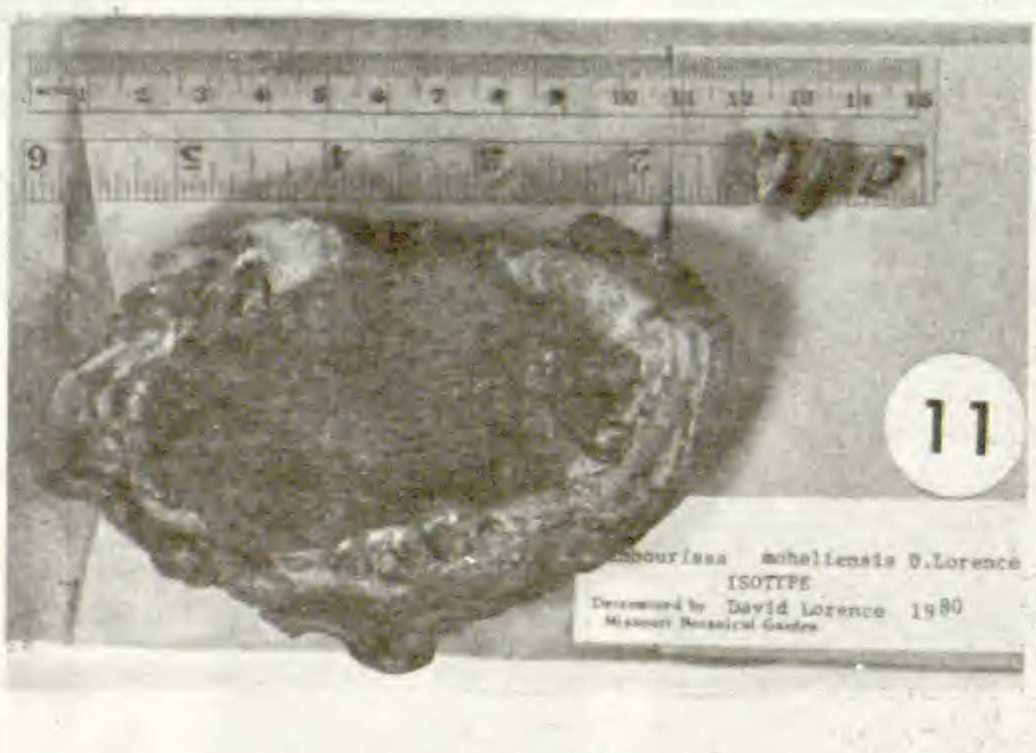
5. **Tambourissa elliptica** (Tul.) A. DC. subsp. **micrantha** Lorence, *subsp. nov.*

A T. elliptica (Tul.) A. DC. subsp. elliptica *similis sed statura grandiori ad 12 m alta × 30 cm diametro, vertice compacto denso ; habitu monoico ; foliis chartaceis, lamina magis duplo longiore quam lata (80-180 (-220) × 25-65 mm), elliptica ad angusto elliptica vel oblonga ; floribus in racemis vel ramifloribus vel axillaribus florum trium ad septem dispositis sæpe solitariis in ramis ordinatis ; floribus masculis expansis minoribus 16-26 mm diam., staminibus paucioribus (65-95), minoribus (1.5-2.5 mm longis) ; floribus fœminis minoribus (6-7 mm diam.), differt.* (Pl. 2, 8).









Pl. 2. — **Tambourissa crassa** Lorence : **7**, stem with solitary, terminal female flower ; note visiting dipteran drinking mucilaginous exudate × 0.4 (*Lorence 2468*, MO). — **Tambourissa elliptica** (Tul.) A. DC. subsp. **micrantha** Lorence : **8**, stem with female inflorescences (above ; note mucilaginous exudate) and male inflorescences (below) × 0.53 (*D. & G. Lorence & Cadet 2488*). — **Tambourissa moheliensis** Lorence : **9**, female inflorescence and leaf ; scale 15 cm (*Bernardi 11781*, holotype) ; **10**, leafy stem and female inflorescence ; scale 15 cm (*Bernardi 11781*, isotype, G) ; **11**, submature fruit (longitudinal section) and carpels ; scale 15 cm (*Bernardi 11781*, isotype, K).

Type : Réunion : *D. Lorence, G. Lorence & T. Cadet 2489*, Brûlé de Baril ; lower montane wet forest, alt. ca. 300 m, 2.3.1979, fl. (holo-, MO ; iso-, K, MAU, P, REU, Z).

Distribution : Endemic to Réunion.

Ecology : *Tambourissa elliptica* subsp. *micrantha* is local and occasional to common in the lowland wet forest zone from ca. 300 to 700 m in the southern sector of Réunion. It is most abundant on the lower slopes of the active volcano, the Piton de la Fournaise massif, at Basse Vallée, Brûlé de Baril, Forêt de la Mare Longue, Mare d'Arzul, and Bois Blanc. Collections are also known from l'Echo below Plaine des Palmistes (ca. 700 m), and the subspecies reaches ca. 1000 m elevation at Brûlé de St. Denis and Plaine d'Affouches.

Remarks : *Tambourissa elliptica* subsp. *micrantha* differs most conspicuously from subsp. *elliptica* by its elliptic to narrowly elliptic leaves with a laminar length to width ratio exceeding 2 : 1 and often approaching 3 : 1. Juvenile and sucker leaves of subsp. *micrantha* are longer and narrower than the adult leaves, have more numerous secondary veins, entire margins, and bright red petioles and midribs. Subspecies *elliptica* has instead serrate-dentate juvenile and sucker leaves, as do most other congeners in Mauritius and the Comores.

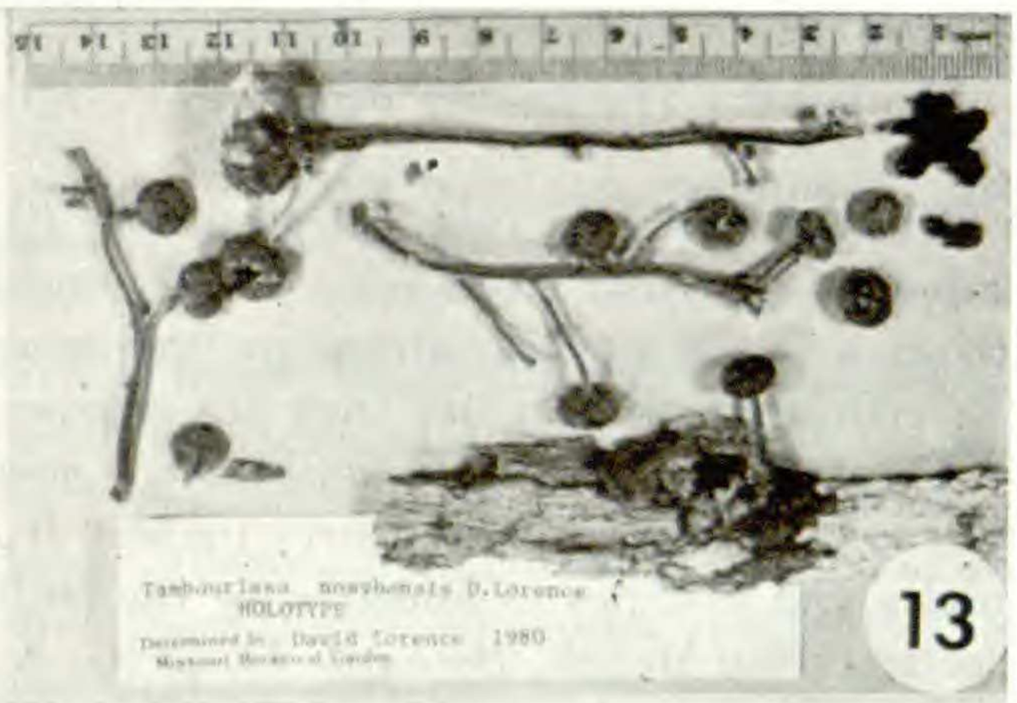
Flowers of both sexes are conspicuously smaller in subsp. *micrantha*, hence the epithet. Most individuals of subsp. *micrantha* are monoecious, often with sexually mixed racemes, whereas sex expression appears to be related to size and/or age in subsp. *elliptica*. Flowers of subsp. *micrantha* are generally racemose and ramiflorous or axillary, whereas those of subsp. *elliptica* tend to be cauliflorous (rarely axillary). Fruits of subsp. *micrantha* are generally smaller, often produced in clusters of two or three on the branches, and are more conspicuously mottled than those of subsp. *elliptica* which are larger, solitary and often caulinary, and more uniformly pale brown.

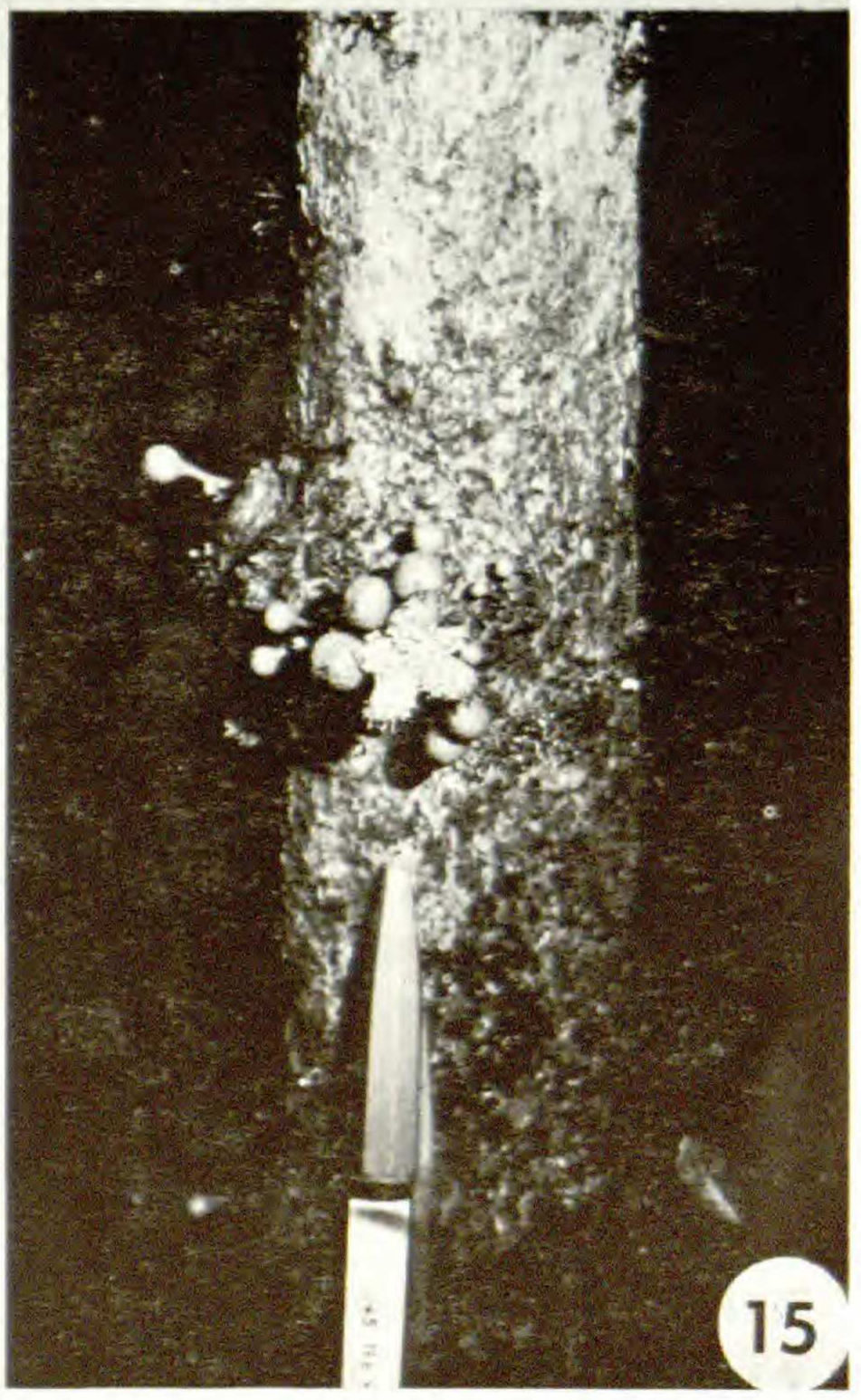
Although both subspecies of *Tambourissa elliptica* occur together in certain areas at low to medium altitudes (e.g., at Hauts du Bois Blanc and Hauts du Brûlé de St. Denis) and remain distinct there, they intergrade in other localities, e.g., at Takamaka (*Lorence 2524*, MO), Dos d'Ane (*Friedmann 2299*, P), Rivière des Remparts (*Cadet 5123, 5124*, REU), and Grand Étang (*Lorence 2758*, MO). Despite occasional intermediate collections, the two taxa are separable by relatively constant, modally distinct characters of floral size and odor (pleasantly sweet-fruity in subsp. *micrantha*, foul and rancid-fruity in subsp. *elliptica*), staminal length and number, ratio of laminar length to width, and fruit size. I have therefore chosen to recognize them as subspecies.

6. **Tambourissa moheliensis** Lorence, *sp. nov.*

A T. capuronii Cav. *affinis, sed inflorescentia canescenti-pubescenti ; floribus masculis staminibusque vero minoribus, receptaculo masculo 5-6 mm diam., staminibus 2.0-2.5 mm longis ; orificio floris fœmini in segmenta quatuor deltoidea fisso, stylis vero brevioribus 1.0-1.3 mm longis × 0.5 mm diam. basi, differt.* (Pl. 2, *9-11*).

Type : Comore archipelago : Moheli : *Bernardi 11781*, mountains between Fomboni and Drondoni ; in low montane forest, 500-700 m alt., 6.12.1967, fl., fr. (holo-, Z ; iso-, G, K).





Pl. 3. — **Tambourissa nosybensis** Lorence : **12**, leafy stem and inflorescences of female flowers ; scale 15 cm (*Bernardi 11847*, isotype, Z) ; **13**, inflorescences of female flowers, plus single male flower in upper right hand corner ; scale 15 cm (*Bernardi 11847*, holotype). — **Tambourissa tau** Lorence : **14**, habit, stem showing pseudoverticillate phyllotaxis × 0.25 (*Lorence*, unvouchered) ; photo taken at Perrier Nature Reserve, Mauritius ; **15**, stem showing cauliflory, the meristematic swellings producing male flower and buds × 0.56 (*Lorence 1976*, MO).

Distribution : Endemic to Mohéli, Comore Archipelago.

Ecology : The species occurs in evergreen montane forest at ca. 500-700 m elevation.

Remarks : Only two collections of *Tambourissa* are presently known from Mohéli, smallest of the four Comores. After considerable deliberation, I have decided to treat both as a single species, although further collections and field observations are required to ascertain whether or not they are conspecific.

The type collection of *Tambourissa moheliensis* (*Bernardi 11781*) possesses two female inflorescences and a single nearly mature fruit. Because it has numerous flowers in both panicles and racemes in addition to the fruit, I have selected it as the type. The second collection from Mohéli, *Bernardi 11759* (G, K, Z), is from montane forest at Mt. St. Antonio (alt. 600-700 m) and differs in having nearly glabrous new growth, smaller and more shortly acute to obtuse leaves with fewer secondary veins oriented at a much greater angle to the costa, and stronger, more distinct secondary vein arches. The more sparsely pubescent male flowers are in short, ramiflorous racemes of up to five flowers, or rarely solitary and axillary or terminal. Apart from the fact that the anther loculi are basally confluent in *Bernardi 11759*, the narrowly acute, subulate stamens with long connectives and closed, globular male flowers most closely resemble those of *T. kirkii* and *T. paradoxa* from neighboring Anjouan, except for the presence of tanniferous idioblasts (lacking in the latter two species.) Although *Bernardi 11759* could represent an undescribed species in terms of male floral and staminal morphology, the specimen at Geneva has a single immature fruit which is corky brown with conical styles and the orifice bears broad, deltoid lobes. It therefore corresponds well enough with the type of *T. moheliensis* and for this reason I tentatively consider both collections conspecific.

On the basis of male floral and staminal morphology *Tambourissa moheliensis*, *T. kirkii* and *T. paradoxa* appear to be closely related species. Unlike the other Comorean species, however, which have entire, circular female floral orifices open even in bud (i.e., *T. comorensis* and *T. leptophylla*), female receptacles of *T. moheliensis* are closed in bud and split open by four deltoid segments as in *T. capuronii* from Madagascar. Furthermore, the female ground tissue and stamens of both the latter species contain numerous dark brown, presumably tanniferous idioblasts not found in any other Comorean species. These characters suggest that *T. moheliensis* may be derived from a different ancestor than the other Comorean species ; it appears to be more closely related to *T. capuronii* from Madagascar.

7. **Tambourissa nosybensis** Lorence, *sp. nov.*

A T. hildebrandtii Perk. *affinis, sed foliis acumine longo paratis, nervis secondariis paucioribus a costa acutius orientibus ; inflorescentia modice vel dense fulvo-velutina, floribus in racemis vel paniculis racemorum compositis, cauliflоris tunc cum floribus 9-12, rhachidi longiore (ad 50-80 mm longa) ; receptaculis florum fœminorum discoideis, patelliformibus, costis longitudinalibus præditis, stylis brevioribus (0.4-0.6 mm longis), brevibus conicis apiculatis, in vivo in exudato mucilagino immersis ; staminibus incurvatis, loculis lateralibus, connectivo 0.5 mm longo, differt.* (Pl. 3, *12, 13*).

Type : Madagascar : *Bernardi 11847*, Diego Suarez : Nosy Be island (Nossi-Bé) ; Lokobe, Natural Reserve no. 6, alt. 350 m, 12.12.1967, fl. (holo-, G ; iso-, K, Z).

Distribution : Known only from Nosy Be island off the northwestern coast of Madagascar.

Ecology : The type was collected in depauperate lower montane wet forest (presumably of *Chlænaceæ*, *Myristicaceæ* and *Anthostema*) at 350 m elevation.

Remarks : Although *Tambourissa nosybensis* is most closely allied to *T. hildebrandtii*, it possesses sufficient distinguishing features to merit specific status, as noted in the diagnosis. *Tambourissa hildebrandtii* differs in having secondary veins at a much greater angle to the costa (55-80º), axillary or ramiflorous inflorescences, outcurved stamens with unilateral loculi and short or unprolonged connectives, unribbed female receptacles, and much longer (1.0-1.5 mm) styles with a strongly papillose surface.

Tambourissa nosybensis displays a number of specialized features including the production of a mucilaginous exudate or competum in the mature female flowers (conspicuous in rehydrated flowers), and also an apparent trend towards dioecism (only a single male flower was found among ca. 34 female flowers in the type collection). Further collections, particularly of male flowers and fruit, and observations on the biology of this poorly known species are desirable.

8. **Tambourissa tau** Lorence, *sp. nov.*

A T. amplifolia (Boj. ex Tul.) A. DC. *affinis, sed foliis plerumque minoribus, subsessilibus in pseudoverticillis aggregatis internodiis longis ; inflorescentia brunnea et suberosa, solum basi pilis sparsis instructa ; floribus solitariis vel in fasciculis florum duorum et trium dispositis, sæpe in ramis vel axillis ordinatis, pedicellis brevioribus ; floribus masculis 4-6-fidis, staminibus in forma T constatis, loculis separatis in radiis lateralibus dispositis ; orificio florum fœminorum lobis 5-10 irregularibus incurvis prædito ; stylis longioribus (2-3 mm longis), setosis ; fructibus pedicellis brevioribus crassioribus præditis, differt.* (Pl. 3, *14, 15*).

Type : Mauritius : *Lorence 1835*, Perrier Nature Reserve ; wet forest with *Sideroxylon* dominant, alt. 600 m, 8.10.1978, fl. (holo-, MO ; iso-, B, K, MAU, P, Z).

Distribution : Endemic to Mauritius.

Ecology : *Tambourissa tau* is one of the commonest and most widespread members of the genus in Mauritius, occuring in most medium to upper altitude wet and cloud forest communities from ca. 300 to 800 m altitude.

Remarks : *Tambourissa tau* is most closely allied to *T. amplifolia*, with which it has frequently been confused both in the herbarium and in the literature (e.g., Vaughan & Wiehe, 1937, 1941, in their vegetational analyses at Mt. Cocotte, Macabé, and Perrier). Both species have large leaves, making them difficult to separate vegetatively, although they are easily recognizable florally. *Tambourissa amplifolia* has canescent inflorescences, internally velutinous female flowers with shorter, non setose styles, and apically confluent anther loculi never found in *T. tau*. The specific epithet *tau* refers to the characteristic T-shaped stamens which are unique in the genus.

A collection from the Curepipe Botanical Garden (*Vaughan sub MAU 12203*, MAU) is typical of *Tambourissa tau* in all characters except the staminal loculi which are sessile, but not apically confluent as in *T. amplifolia*.

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